Appl. No.: Divisional of 10/259,949 Applicants: Ramstack et al.

Atty Docket: 0166.0073.US02

What Is Claimed Is:

1. A method for preparing a composition suitable for injection through a needle into a host, comprising:

- (a) mixing dry microparticles with an injection vehicle to form a first suspension; and
- (b) mixing the first suspension with a viscosity enhancing agent to form a second suspension, wherein the viscosity enhancing agent increases viscosity of a fluid phase of the second suspension to be in the range of from about 20 cp to about 600 cp at 20°C, wherein the viscosity of the fluid phase of the second suspension provides injectability of the composition through a needle ranging in diameter from 18-22 gauge.
- 2. The method of claim 1, wherein the viscosity of the injection vehicle prior to step (b) is less than about 60 cp at 20°C.
- 3. The method of claim 1, wherein the viscosity of the fluid phase of the second suspension after step (b) is from about 200 cp to about 600 cp at 20°C.
- 4. The method of claim 1, wherein the concentration of microparticles in the first suspension is greater than about 30 mg/ml.
- 5. The method of claim 1, wherein a viscosity of the viscosity enhancing agent is from about 1000 to about 2000 cp at 20°C.
- 6. The method of claim 1, wherein the viscosity enhancing agent comprises sodium carboxymethyl cellulose.

DC: 1024839-1 MED97-01 - 30 -

Appl. No.: Divisional of 10/259,949 Applicants: Ramstack et al. Atty Docket: 0166.0073.US02

- 7. The method of claim 1, wherein a volume of the viscosity enhancing agent mixed with the first suspension is approximately 10-25% of the volume of the first suspension.
 - 8. The method of claim 1, further comprising before step (b):
 - (c) withdrawing the first suspension into a first syringe.
 - 9. The method of claim 8, wherein step (b) comprises:
 - (i) providing a second syringe containing the viscosity enhancing agent;
 - (ii) coupling the first syringe to the second syringe so that fluid can pass between the first and second syringes; and
 - (iii) repeatedly passing the first suspension and the viscosity enhancing agent between the first and second syringes.
- 10. The method of claim 1, wherein the microparticles comprise a polymeric binder.
 - 11. A method for administering a composition to a host, comprising:
 - (a) mixing dry microparticles with an injection vehicle to form a first suspension;
 - (b) mixing the first suspension with a viscosity enhancing agent to form a second suspension, wherein the viscosity enhancing agent increases viscosity of a fluid phase of the second suspension to be in the range of from about 20 cp to about 600 cp at 20°C; and
 - (c) injecting the second suspension into the host through a needle ranging in diameter from 18-22 gauge.
- 12. The method of claim 11, wherein the microparticles comprise a polymeric binder.

Appl. No.: Divisional of 10/259,949 Applicants: Ramstack et al. Atty Docket: 0166.0073.US02

- 13. A method for administering a composition to a host, comprising:
 - (a) mixing dry microparticles with an injection vehicle to form a suspension, wherein the injection vehicle has a viscosity at 20°C of less than about 60 cp;
 - (b) changing the viscosity of a fluid phase of the suspension to be in the range of from about 20 cp to about 600 cp at 20°C;
 - (c) withdrawing the suspension into a syringe; and
 - (d) injecting the suspension from the syringe into the host through a needle ranging in diameter from 18-22 gauge.
- 14. The method of claim 13, wherein step (b) comprises: changing the temperature of the fluid phase of the suspension.
- 15. The method of claim 13, wherein step (c) is performed prior to step (b), and step (b) comprises:

adding a viscosity enhancing agent to the suspension in the syringe to thereby increase the viscosity of the fluid phase of the suspension.

- 16. The method of claim 15, wherein the viscosity enhancing agent comprises sodium carboxymethyl cellulose.
- 17. The method of claim 11, wherein the microparticles comprise an active agent.
- 18. A method of making a composition suitable for injection through a needle into a host, comprising:
 - (a) providing microparticles comprising a polymeric binder;
 - (b) providing an injection vehicle having a viscosity of at least 20 cp at 20°C; and

Appl. No.: Divisional of 10/259,949
Applicants: Ramstack et al.
Atty Docket: 0166.0073.US02

- suspending the microparticles in the injection vehicle to form a suspension, wherein the viscosity of a fluid phase of the suspension is in the range of from about 20 cp to about 600 cp at 20°C, wherein the viscosity of the fluid phase of the suspension provides injectability of the composition through a needle ranging in diameter from 18-22 gauge.
- 19. The method of claim 13, wherein step (c) is performed prior to step (b).
- 20. A composition suitable for injection through a needle into a host prepared by the method of claim 1.
- 21. A method for administering a composition to a host, comprising: injecting the composition of claim 20 into the host through a needle ranging in diameter from 18-22 gauge.
- 22. The composition of claim 20, wherein the microparticles comprise an active agent and a polymeric binder.
- 23. The composition of claim 22, wherein the polymeric binder is poly(d,l-lactide-co-glycolide) having a molar ratio of lactide to glycolide in the range of from about 85:15 to about 50:50.
- 24. The composition of claim 22, wherein the active agent is selected from the group consisting of risperidone, 9-hydroxyrisperidone, and pharmaceutically acceptable salts thereof.
- 25. A composition suitable for injection through a needle into a host prepared by the method of claim 18.

Appl. No.: Divisional of 10/259,949
Applicants: Ramstack et al.

Atty Docket: 0166.0073.US02

26. The composition of claim 25, wherein the microparticles further comprise an active agent.

- 27. The composition of claim 25, wherein the polymeric binder is poly(d,l-lactide-co-glycolide) having a molar ratio of lactide to glycolide in the range of from about 100:0 to about 50:50.
- 28. The composition of claim 26, wherein the active agent is selected from the group consisting of risperidone, 9-hydroxyrisperidone, and pharmaceutically acceptable salts thereof.